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ABSTRACT

This paper reports on a qualitative ethnographic research study on the inclusion of children with severe disabilities into a Montessori preschool program in Lawrence, Kansas. The program has served 20 children with disabilities since its inception in 1986. The program's emergent model involves a split program (utilizing a special education classroom and the community preschool) with use of integration facilitators and cooperative efforts among early childhood special educators, mainstream Montessori early childhood educators, and families. The project is based on seven specified values such as the rejection that children with disabilities must be "fixed" before they can be fully included. The program has developed several products including video documentation of participants' attitudes and inclusive strategies, a training handbook, specific checklists, and an Individualized Education Program observational matrix. A variety of studies are looking at the program including two recently completed studies on the communicative interactions of preschool children with severe disabilities in the two settings. The model is currently being replicated and validated in Kansas City, Kansas. Attached tables provide detailed data on children in the program, interviews conducted, varieties of project documentation, outcome markers identified in evaluation efforts, concerns and benefits expressed by participants, and variables related to the Montessori approach. (Contains 24 references.) (DB)

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# A Qualitative Research Approach for Investigating and Evaluating an Emergent Early Childhood Inclusion Model for Children with Severe Disabilities in a Montessori Preschool

by

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## A Brief Look Inside: Introductory Anecdotes

**Event**: Production phase for videotapes about a program of integration for young children with severe disabilities into a community Montessori preschool.

Sophie is a charming, 4-year-old, typically developing child with blue eyes.

Shannon is Sophie's classmate. She is a 5-year-old girl, also a charmer, with brown eyes and a ready smile. Shannon experiences multiple disabilities including microcephaly and cerebral palsy, predominantly on her left side. She is ambulatory but cannot talk.

**Interviewer:** *Well, Sophie, do you think Shannon should be at Raintree or do you think maybe she should go to a preschool for other children just like her?*

**Sophie** (after a short and apparently reflective pause): *No, she should go to Raintree, because how would all the children know who the teacher was talking to . . . with everybody named Shannon in that school?*

**Event**: An early morning fender-bender in the icy parking lot of Raintree Montessori School at the arrival time for the morning preschool session, and the resulting conversation between Scott's and Mohammed's mothers.

Mohammed is a 4-year-old boy who is certified as having deaf/blindness. He is also nonverbal and nonambulatory.

Scott is also 4 years old and can be characterized as a very verbal and active young boy with typical development.

**Mohammed's Mom:** *Hi, I'm Mohammed's mother.*

**Scott's Mom:** *Oh, I've been meaning to call you. Scott talks about Mohammed all the time. The boys seem to have become the best of friends.*

**Mohammed's Mom:** *Well, of course I've met Scott when I pick Mohammed up. I'd really appreciate it if you would you carry Mohammed into school while I deal with my car?*

**Scott's Mom:** *Oh, I don't think it is so icy that the boys can't walk in on their own.*

**Mohammed's Mom** (after a slightly stunned pause, and as she lifts Mohammed out of the car seat): *Um, well, Mohammed is handicapped and he can't walk by himself.*

**Scott's Mom** (a somewhat embarrassed and quick response): *Well, certainly I will be happy to carry him in. Hi, Mohammed, it's nice to meet you.*

**Scott's Mom** (later when she picks up Scott; to Pam, the boys' teacher): *I have heard about Mohammed for several months and I had no idea he was handicapped—and he is in fact very handicapped! I'm absolutely stunned by the fact that Scott never mentioned it to me.*

There are many such anecdotes related by participants in our program, which involves the inclusion of preschool- and kindergarten-age children with severe disabilities in a private community Montessori early childhood preschool and child care program. The anecdotes offer evidence of something the participating adults have consistently been reminded of: young children do not view or respond to the presence of a person with a disability the same way as adults do. And, more importantly, the children's responses to their peers who experience very severe disabilities strongly support the belief that the early childhood period is the most opportune time to begin breaking down the societal barriers and discrimination that confront persons with disabilities and their families.

Our observations do not suggest that the typically developing children are unaware of the differences presented by their friends who experience severe disabilities. Their countless questions related to the disabling conditions of their classmates give testimony to the fact that they do. Questions such as, "I never knew a 5-year-old who wore diapers before," and, "I never knew a 5-year-old who couldn't walk on the bottom of the pool before," "Why can't he say it with his mouth?" (i.e., *talk*) or, "Why does he spit all the time?" (i.e., *drool*) offer evidence of their interest and need to understand the differences they recognize in their peers.

Their questions do not, however, reflect value judgments about individual worth, signal rejection, or suggest a questioning of a child's right to be part of the same setting. In fact, it is not unusual to hear the child who originally asked the question telling another peer the information contained in the adult's response. It is also not unusual to hear similar information offered by a different child who overheard when the question was first posed and answered. The role of informant, interpreter and facilitator for a child with a disability is often naturally assumed by typically developing peers of 3, 4 and 5 years of age. For example, you might overhear something like this:

> *Jacob can't talk because his muscles don't work very well, but he knows all about the sound cylinders. He can't shake them—but he nods his head if they sound the same. He knows all about them.*

Our favorite story illustrating this experience concerns Shawn and Cedric. Shawn was always quick to spot a new person in the setting and to introduce Cedric.

> *This is my good friend Cedric* [he would always begin]. *Cedric can't talk or walk because his muscles don't work as well as mine, but he is learning. Cedric likes to swing and do water works. Cedric has two brothers, and Cedric wears diapers.*

Not having to wearing diapers is, of course, a significant rite of passage for young children and symbolizes a change of status from being considered a baby to becoming a child. It is therefore a topic frequently raised by typically developing preschoolers when they first meet a classmate with severe disabilities. After several repetitions of this introduction, Kim (Cedric's Integration Facilitator) had a discussion with Shawn in which she emphasized what a good friend he was being to Cedric by helping him meet new people. Kim then broached the subject of diapers and explained how it is difficult for Cedric to let people know that he has to go to the bathroom or to get to a bathroom on his own. She proceeded to elaborate on the issue of privacy from what she hoped was the perspective of a 4-year-old. She pointed out to Shawn that the reason Cedric wears diapers is of interest to those of us who know Cedric, but this is private information that isn't appropriate to announce to every stranger who visits the program.

Several days after this conversation, a visitor came to the classroom and was quickly approached by Shawn as soon as he noticed that the visitor was observing Cedric. Once again Shawn offered his introduction:

> *This is my good friend Cedric. He can't walk or talk but he likes a lot of things. We like to eat snack together. He has two brothers, but there is one thing I won't be telling you about Cedric!*

## Research Focus and Program Summary

A program of inclusion for young children with severe disabilities is the focus of the qualitative investigation discussed in this paper. The program has been under development since 1986 when Dana, a charming 3-year-old with profound multiple disabilities, left a state institution for persons with developmental disabilities and joined a foster family in Lawrence, Kansas. The purpose of the inquiry was to delineate the issues and effective strategies to be considered when recommending a best-practice approach for similar integration efforts in other settings. Relative to that overall focus, the research project's aims can be characterized as:

- to portray the events, issues and meaning of the child's transition to a program of inclusion from the viewpoints of those involved, so that strategies and information may be made available to support individuals from other programs as they launch into this process;
- to document the nature of children's interactions in the settings and the nature of their participation, and to evaluate the personal and environmental accommodations required of participants, so that the salient strategies that enhance meaningful instructional and social inclusion may be identified and recommended;
- to facilitate the development of what has come to be called an *emergent model* of inclusion that has functional and accessible features for other programs, so that (parts of) this approach may be used by individuals from other programs as they move forward in the process of developing inclusive early childhood and child care programs; and
- to delineate variables that could serve as the basis for quantitative investigations that may further enhance our understanding of the process and the model.

Dana began attending Raintree Montessori School, a private community child care and preschool program that serves typically developing children, shortly after her arrival in Lawrence. She was the first of 20 children to participate in the project for the inclusion of young children with severe disabilities in mainstream early childhood and child care programs. Table 1 provides descriptive information about the children who have participated in the mainstream program. (Tables are located at the end of this document.) Table 1 displays the children's diagnosed disabilities and assessed development at the point of entry into the program: the majority of the children experience severe to profound multiple disabilities, while four of the 20 children have Down Syndrome.

Raintree Montessori school was selected because it enjoys an excellent reputation in the community. It soon became apparent, moreover, that the Montessori method of early childhood education has particular viability as part of a model for integrating preschoolers with severe and profound multiple disabilities into mainstream programs. A very practical consideration is the relative uniformity and availability of Montessori programs, which serves to increase the likelihood that procedures developed in one setting can be replicated across others. Additionally, several important features of the Montessori approach can be directly related to current best practice in special education as well as to factors that contribute to successful integration. Certified Montessori teachers must meet rigorous standards for training and performance and are well qualified early childhood educators who hold very child-focused beliefs and have well-refined observational skills. Specific features of the Montessori approach can be individually linked to either the teacher preparation or the prepared environment. Discussions of these features often mention the inclusion of mixed age groups in a single classroom, the child-oriented design of the setting, the focus on choice and child autonomy, and the inherently interesting and functional materials available (Krogh, 1982; Safford, 1989; Thompson et al., 1991; Wegner, 1989).

Participants in this ethnographic investigation include the families both of children with disabilities and of children typical in their development, the staff from both the special education and the community Montessori preschool programs, the Integration Facilitators who accompany the child with a disability to the mainstream classroom and, of course, the children with severe disabilities and their typically developing peers. Table 2 summarizes the roles of the adult participants and provides information about the number of interviews taped and transcribed. Table 3 identifies the types of referential and other forms of data also collected in this investigation.

As noted, 20 children have participated in this project: four in a Kansas City replication program begun in spring 1991, and 15 from the original program in Lawrence. Initially, the children attended the Montessori program for two half-days per week while also attending the Special Education program from Monday through Thursday for half-days. Subsequently, the program has begun to meet some of the *child care needs* of the participating families. From September 1990, the children increased their attendance in the community preschool from two to five sessions per week. Many of the children eat lunch in the mainstream program, and some have participated in child care before and/or after school.

The model can be characterized as a *split program* (although one child attends the mainstream program exclusively, and during the summer all the children attend only the mainstream summer program). The model also involves the use of ***Integration Facilitators*** who are trained to support the full inclusion of the children within the mainstream program. The project is the result of a *cooperative effort* among early childhood special educators, mainstream Montessori

**Figure 1. Circle of Inclusion Project Values**

1. We reject the notion that children with disabilities must first be "fixed" (often couched in terms of their meeting certain criteria before they are ready to take their place in families, neighborhood and community environments and to experience the normal flow of everyday life and friendships available to those of us who have not had to meet the challenges of having a disability). Specifically, we are concerned that preschool children with severe and profound disabilities and their families have the right to high-quality child care and preschool services within the mainstream of community programs available to typically developing children and their families.
2. We recognize that typically developing preschoolers must have an opportunity to have contact with and develop relationships with children who experience the full range of disabilities, including children with the most severe and profound disabilities. We acknowledge the importance of children learning to live in a pluralistic society and to accept differences at an early age. We believe that typically developing preschool children are at a critical readiness period for the experience of knowing a child with a very severe disability and that their lives will be enriched by reaching out to friends who experience disabilities.
3. We believe that a viable program needs to reflect involvement, input and ongoing collaborative efforts from the key stake-holders, including the families receiving services, and the special education and mainstream community early childhood program personnel.
4. We hold deep respect for the uniqueness and dignity of each child as an individual human being who merits our careful observation and response to his or her needs. We reject the application of any aversive procedures and believe that the acknowledgment of child preference, the development of choice-making skills, a sense of self, and the development of personal autonomy are critical.
5. We believe that mainstream programming efforts must incorporate best practice approaches that not only include ongoing social interactions with typically developing age peers, but also incorporate functional objectives taught and practiced through age-appropriate and functional activities and materials involving the application of activity-based programming and other procedures to promote generalization. Additionally, objectives and activities must be based on family involvement and family priorities as well as integrated team input. Finally, the principle of partial participation should be used systematically to maximize involvement.
6. We accept the concept of natural proportions and believe that it is best to place young children with severe disabilities in mainstream programs in accordance with realistic population distributions.
7. Our time and energy should be vested in investigating the variables that make mainstreaming endeavors work in the best possible way, rather than focusing on whether or not they work.

early childhood educators, and families who share the same values about the life experiences that should be available to children. More specifically, *seven values* guided the model's development and also serve to focus the research efforts (see Figure 1).

### Summary of Research Procedures

At this time the investigators have had sustained involvement with the qualitative research procedures for approximately five years in the process of implementing and investigating the inclusive early childhood program. The substantial time span of this project has allowed prolonged contact with participants, as well as the collection of data on both the *short- and long-term* issues and practices surrounding the inclusion of this challenging group of youngsters in a mainstream setting. Issues of reliability and validity for ethnographic studies are best satisfied through persistent and prolonged engagement with the participants and the settings one is seeking to understand and describe. Additionally, multiple sources of data can be more systematically and extensively collected and the "triangulation" or cross-validation of data sources more thoroughly and rigorously pursued over extended periods of time.

The investigation has followed recommended procedures for conducting qualitative research, as described by Lincoln and Guba (1985) in their discussion of naturalistic inquiry methods. The methodology follows that offered by Glaser and Strauss (1967) in their discussion of strategies and discovery of grounded theory. Tables depicting the sources of data and research procedures are as follows: Table 4 summarizes the qualitative methodology employed in the investigation, and Table 5 displays the categorical and subcategorical units resulting from the data analysis.

Data are entered into a *HyperCard®* data base developed specifically to store and sort the narrative data units collected in this investigation. Over a thousand (1,338) individual units of data from interviews and field notes were entered into the data base for analysis using the constant comparison method (Glaser & Strauss, 1967).

### Summary of Participant Issues and Data for Emergent Themes

In order to conduct model development and evaluation, procedures and events that are perceived as positive indicators of program growth must be documented. These can serve as a means of gauging the program's success and sustainability over time. Table 6 lists the markers identified by participants as indicators of program success and growth.

Table 7 displays the concerns of the participants before the project began. Issues of concern must be anticipated and addressed immediately as inclusive programs are planned and implemented.

Besides concerns, all the participants have identified numerous benefits of this program. These benefits are important both as part of the rationale for the model and for initiating similar efforts in other sites; they are identified in Table 8.

A number of issues have arisen from the split program arrangements between a special education early intervention program and a mainstream preschool and child care program, as the children spend half-days in each setting. Table 9 identifies the considerable impact of a split program on all participants. In such a split program model, children are in *daily* transition from one program to another, and effective transition strategies must be implemented on an ongoing basis.

Table 10 shows that a common concern is the adjustment to the mainstream program that is required of parents who are used to dealing with special education programs—although this is not an insurmountable problem. Essentially, parents want to be like all the other parents. Yet the parents of the children with special needs often expressed a desire to be given more attention and information than the parents of the typically developing children. Given the staff situations in most mainstream programs, this is a

challenging issue that needs to be addressed by models involving integrated preschool and child care services for children with severe disabilities. Additionally, parents often need encouragement to participate in the ongoing program functions for all families.

Table 11 lists the characteristics of the participating preschoolers with severe to profound multiple disabilities. Integration of these children requires careful planning and consideration of their needs for accommodation in mainstream settings in as unintrusive a manner as possible. These needs also have clear implications for planning training content for staff and for the design of effective models. Additionally, how typically developing children view, learn about and interact with their peers who experience disabilities has emerged as a fascinating component of the investigation.

Many people have preconceptions of what a Montessori program is like. It was interesting to find that while some of these notions were negative, the Raintree preschool was consistently viewed as a superior program. And, while many Montessori attributes were features of Raintree that were cited as helpful, these features were not perceived as associated with the Montessori approach! Clearly, attitudes about the Montessori approach must be considered in developing a mainstream model involving such a program. Table 12 lists the issues that arose surrounding the Montessori method.

One of the most critical of the emergent components of this model is the role of the *Integration Facilitator*. This role has consistently taken on increasing significance both for design of the specific model and from the point of view of personnel training and certification. As the role develops and is defined in educational programs, the potential for negative secondary effects must be considered and addressed. In general, the Facilitator is viewed in an extremely positive manner and seems to offer a child the best of both worlds of education—the sensitivity of one-to-one instruction, which allows for finite and precise adjustment to accommodate learning/performance needs, and support for membership in a group that has much to offer if access can be gained. The danger lies, of course, in setting the child apart and fostering dependence rather than independence.

In integrative educational programs, participants may have differing philosophies and values. If those differences are not clarified and addressed, problems emerge that are key concerns in inclusive programs. Additionally, the issues of re-entrenchment of special educators and related service personnel have also emerged as factors that were not initially apparent.

Finally, it is important to note that both individual persistence and a personal sense of mission have a great capacity to shape program outcomes. This has been observed and documented repeatedly in our research. The power of an overtly stated value base to guide practice has also emerged as significant. A list of the program values can be found in Figure 1.

## Development of Products or Tools Based on the Qualitative Investigation

A qualitative investigation offers a particularly rich research and production environment within the context of model development. Following is a brief description of some of the key products and tools under development that may provide some insight into the variables and issues that have emerged as critical.

### Written documentation of the attitudes, concerns and perceptions of participants

Working papers and manuscripts are in progress. These report the experiences and perceptions of each participant group (families, special educators, early educators and child care staff, and children) concerning the transition into integrated child care and preschool services. Following the ethnographic style of rich and thick description that is viewed as critical to issues of validity, these manuscripts are being written to convey the sense of a direct report from participants. Specifically,

the manuscripts are under development as chapters so that they can be integrated into a book reflecting this transition within the context of the *ecocultural niche model* as initially articulated by Gallimore, Weisner, Kaufman, and Bernheimer (1989) and considered within the context of transitions by Rice and O'Brien (1990). There is evidence of a paradigm shift in the philosophical and theoretical bases guiding special education services for families and young children who experience severe disabilities, in the discussion of the impact of the transition on the professional collaboration that evolved among participants.

Video documentation of the attitudes, concerns, and perceptions of participants and of what strategies should do to support the inclusion of the children

Three videotapes are currently in the final stages of post-production editing. They were developed as part of an adjunct endeavor funded by a 1990 Innovative Project award from the U.S. Department of Education, National Institute for Disability Research. The overall purpose of this project was to provide video media for professionals and families who might consider developing the service options of integrated preschool and child care programs for young children with severe disabilities.

The first videotape, *A Circle of Inclusion* (27 minutes), is an introductory video depicting the issues that arose during the transition of the children into the community preschool and child care program. It provides the perspectives of the participants, including special educators, mainstream program staff (both administrator and teacher points of view), parents of children with disabilities who were in the program, representative parents of typically developing children in the program and, of course, participating children themselves.

Specifically, the content of this videotape reflects participants' perceptions as documented during the qualitative investigation. The script was developed using a membership check process, advocated by Guba and Lincoln (1989) as a procedure for ensuring validity of an ethnographic research effort. This method brings together those individuals whose programs, perceptions and experiences were investigated using participatory observation and interview procedures. Participants are asked to review and respond to the documentation, case studies and reports of the investigation. The content of the script was developed from the interview transcripts and field notes, and participants repeatedly reviewed drafts of the script. Special education staff, mainstream early educators, and representative parents all took part extensively in this process.

Two other videotapes were developed, *The Process of Instruction* (11 minutes) and *The Process of Communication* (8 minutes), which depict key facilitation strategies for supporting the successful inclusion of the children with disabilities. The selected strategies were those that had emerged as the most critical from the perspectives of the teachers and Integration Facilitators directly involved in the inclusive programming.

A training handbook

*Circles of Inclusion: A Handbook for Planning and Implementing the Integration of Young Children with Severe Disabilities into Mainstream Montessori Preschool and Child Care Programs* is under development to assist others in replicating integrated preschool and child care programs in Montessori preschools. The handbook is a comprehensive document based on the qualitative and observational investigations ongoing for the past two-and-one-half years. It includes specific training content and materials needed for staff training activities or self study.

Checklists and planning tools

The selection of content and subsequent development of checklists and planning tools were also guided by the qualitative and observational investigations. Draft versions of the following instruments have been developed:

***Initiating Early Childhood Mainstream Programming for Young Children with Severe Disabilities: A Checklist for Considering and Planning Start Up Activities*** was developed to guide a program interested in pursuing integration to attend to the 10 components identified as critical to successful transition:

1. Enlist support and collaborative planning.
2. Identify and secure funding sources.
3. Select a program model.
4. Select an appropriate mainstream program.
5. Identify and plan how children's placements are to be supported in the mainstream setting.
6. Match funds to program expenses.
7. Determine program logistics and make necessary arrangements.
8. Orient families of children with disabilities to program.
9. Plan ongoing program coordination strategies.
10. Assess and plan child accommodation needs.

***Facilitating the Integration of Young Children with Severe Disabilities in Mainstream Early Childhood Programs: A Checklist for Considering and Planning Content and Activities for Training Personnel*** was developed to provide guidelines for planning the training of personnel who will be involved in facilitating the integration of a child with severe disabilities in a mainstream early childhood program. Identified key areas of training include:

- initial activities
- characteristics of children with severe and multiple disabilities
- first aid and infection control
- positioning and handling
- integration rationale and philosophy
- Individual Education Programs (IEPs)
- basic instructional procedures
- Montessori method and its application to special education
- mainstream site classroom procedures
- techniques to use with the child who has a disability in order to facilitate the child's full inclusion and interactions with typically developing peers
- techniques to use with the typically developing children to facilitate acceptance, understanding and inclusion of children with disabilities
- strategies for practicing and monitoring IEP objectives
- skills to enhance a Facilitator's role in a mainstream classroom
- the facilitation role outside the classroom.

***The Circles of Inclusion Project: IEP Observational Matrix*** was developed to plan for and measure implementation of Individual Education Program objectives in an integrated setting where more traditional data collection measures may be too obtrusive. The matrix allows an observer to record:

- the positioning or seating of the child to participate in the activity
- who initiated the activity
- the skills as identified on the IEP
- the activities that occur in a Montessori program.

***Initial/Probe Teacher Satisfaction Checklist*** was developed to solicit feedback on the performance of the Integration Facilitator and success of the child's integration into the mainstream classroom. This checklist should be administered when the child first enters the mainstream program and then periodically throughout the school year as agreed upon by the special education teacher and the mainstream teacher. A major impetus for this checklist was documentation of problems that could have been addressed more quickly and effectively if such a system had been in place.

The ***Integration Observation Evaluation*** form was developed to give meaningful and complete feedback to a trainee for the role of Integration Facilitator in this project model, or to a student learning integration facilitation strategies in a practicum situation. The form was designed jointly by the research project staff and by practicum supervision staff in the

area of Severe Multiple Disabilities and Early Childhood Special Education in the Department of Special Education at the University of Kansas.

## Research Tools and Investigations Guided by the Qualitative Investigation

Currently, 11 studies have emerged or received impetus and direction as a result of the qualitative research conducted in this project. The studies are in various phases of progress. Two were recently completed on the communicative interactions of preschool children with severe disabilities in the two settings (the special education classroom and the community Montessori preschool). The variables of concern in those two studies were:

**Child Profile:**

- number of initiations
- communicative modes used
- number of participatory turns
- average number of participatory turns per interaction

**Partner Profile:**

- number of initiations
- communicative modes used
- number of participatory turns
- average number of participatory turns per interaction

**Interactions:**

- number of different partners
- number of interactions
- number of adult versus child partners
- purpose of interaction

What prompted these two studies was an issue that consistently emerged in the ethnographic study: the adaptations that need to be made in mainstream environments for youngsters with severe disabilities. Issues pertaining to the degree of intrusiveness of the adaptations were of particular concern to a number of participants. Specifically, one study focused on the effect of an augmentative communication system on child interactions in a mainstream setting, while the other study focused on the effect of adapted positioning equipment on interactions.

In these studies, the instrument ***CEVIT: Coding Environmental Variables and Interactions on Tape,*** (Thompson, Wegner, Wickham, Dillon, Kimura & Ault, 1991) was employed as a data collection tool. The *CEVIT* is an observational coding system designed as a research instrument for this project. It was developed specifically for analyzing videotaped segments of targeted children's interactions during preschool classroom activities. As with the products described earlier, the coded variables were based on factors that emerged as important in the qualitative investigation.

Another component of the ongoing research is the verbatim transcription of the audio content of the videotapes. The topical content of the interactions is being documented and analyzed, and enhances the interpretation of the results of the coded data.

A study is also under development to assess the effect of training strategies and materials on the performance of the Integration Facilitators.

Finally, the entire model is being replicated and validated in a special education preschool and a Montessori preschool and child care program in Kansas City, Kansas.

## Conclusion

The qualitative approach has made possible a holistic view of a complex system and offers a means of addressing multiple components of the model and its impact. Issues concerning the sustainability of the model have certainly emerged as critical and related to an extremely complex set of factors.

Inherent in the qualitative approach is the means to flexibly adjust perspectives and units of analysis. Hence, one can observe and consider the nature of child interactions as well as the dynamics of personnel role changes, features of the model that emerge as salient, and the process of system change.

The richness of an ethnographic research environment for considering critical questions from a grounded perspective has emerged as one of the most essential characteristics of this approach. Additional aspects of this experience are its immense capacity to affect personal and professional introspection, and its potential for serving as the impetus for fundamental changes in perspective. Above all, the experience of participating in the development and qualitative investigation of a model of full inclusion for preschoolers with severe disabilities has been one of joy, meaning and mission. The intense quality of interactions with colleagues also involved in this investigation, the ongoing reflection, the process of analysis, and the need for introspection and self-questioning that are part of the process of participant observation within an ethnographic model have caused us to question our assumptions and beliefs about how children are to be educated, our understanding of how they learn, our approach to personnel preparation, and our roles as researchers and educators. For example, participation directly influenced the first author to shift from a rather "behavioral" and "teacher-directed" perspective to a much more developmental and child-focused perspective—one that places much more emphasis on the autonomy and independent nature of the learner.

Ultimately, participation in this project has intensified the investigators' awareness of the need for a fundamental change in the nature of program services available to young children, and the critical need for policy reform in educational, health and human service systems.

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**Table 1. Descriptive information about the children with disabilities participating in Circle of Inclusion Project at the time of entry into mainstream program**

| Subject/ Number | Mainstream Transition Date | Age in Months | Gender | Diagnosed Condition | Assessed Development in Months at Entry into Mainstream Program[a] | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | cognitive | social | language | motor |
| DD 1 | 10/6/86 | 39 | F | Deaf-blind Cerebral Palsy | 0-6[b] | 6-18 | 0 | g. 0-6 f. 0-6 |
| CS 2 | 2/1/88 | 41 | M | Cerebral Palsy Microcephaly | 1-6 | 8-15 | e. 3-8 r. 3-9 | g. 2-5 f. 1-4 |
| MA 3 | 2/1/88 | 56 | M | Deaf-blind | 3-8 | 6-9 | e. 4-6 r. 6-7 | g. 5-6 f. 5-9 |
| JF 4 | 2/8/89 | 39 | M | Cerebral Palsy | 3-6 | 6-7 | e. 6-7 r. 10 | g. 3-6 f. 3 |
| CA 5 | 2/8/89 | 35 | M | Cerebral Palsy | 6-9 | 9-15 | e. 4-6 r. 8-10 | g. 6 f. 3-6 |
| GM 6 | 4/3/89 | 46 | M | Down Syn. | 22-27 | 28-30 | e. 28 r. 28 | g. 24 f. 26 |
| MA 7 | 4/3/89 | 51 | F | Down Syn. | 36-48 | 36-39 | e. 34 r. 32-37 | g. 26 f. 24 |
| SD 8 | 9/28/89 | 52 | F | Cerebral Palsy Visual Imp. | 11-12 | 11-18 | e. 8-9 r. 8-10 | g. 6-15 f. 12-15 |
| SB 9 | 9/10/90 | 60 | F | Cerebral Palsy Microcephaly | 24-36 | 24-36 | e. 19 r. 36 | g. 18-21 f. 6-15 |
| SW 10 | 9/10/90 | 56 | F | Down Syn. | 30-42 | 32-34 | e. 19 r. 8-30 | g. 18-21 f. 28 |
| LB 11 | 4/18/91 | 65 | F | Cerebral Palsy | 12-24 | 10-30 | 18-24 | g. 12 f. 12-15 |
| NA 12 | 9/3/91 | 52 | M | Sp-Lang. Delay Hearing Imp. | 18-24 | 16-24 | e. 4-12 r. 3-18 | g. 12-24 f. 12-21 |
| LW 13 | 9/16/92 | 45 | F | Cerebral Palsy Visual Imp. | 6-9 | 3-6 | e. 3-24 r. 3-18 | g. 12-24 f. 12-21 |
| MG 14 | 9/17/91 | 60 | M | Down Syn. | 27-32 | 25-36 | e. 18-21 r. 25 | g. 18-41 f. 15-35 |
| MB 15 | 11/27/91 | 62 | M | Trisomy 6 | 9-18 | 6-18 | e. 6-9 r. 3-6 | g. 4-9 f. 4-7 |
| BS 16 | 12/9/91 | 48 | M | Cerebral Palsy | 0-9 | 0-9 | e. 0-9 r. 0-9 | g. 0-6 f. 0-9 |
| DW 17 | 12/11/91 | 54 | M | Meningitis Hydrocephaly | 24 | no score assigned | e. 28 r. 27 | g. 19-24 f. 18-27 |
| RH 18 | 1/1/92 | 38 | M | Developmental Delays | 18-24 | 18-24 | e. 16-18 r. 18-24 | g. 12 f. 18-20 |
| CB 19 | 2/4/92 | 64 | F | DeMorsier's Syn. Cerebral Palsy | 6-9 | 6-9 | 7-8 | g. 8-9 f. 8-9 |
| TM 20 | 2/17/92 | 46 | F | Cerebral Palsy | 1-15 | 0-6 | e. 4-13 r. 4-13 | g. 3-9 f. 3-9 |

[a] Scores obtained from developmental assessments conducted by interdisciplinary professional team in special education program

[b] Represents a range of subscores in months (e.g., 3 to 6 months)

e. = expressive language score & r. = receptive language score; g. = gross motor score and f. = fine motor score

**Table 2. Transcribed interviews of participants in Circle of Inclusion Project**

| Role | Number of Participants | Number of Interviews | Average Length of Transcribed Interview in Pages |
|---|---|---|---|
| Mainstream Administrator | 1 | 2 | 30 |
| Mainstream Preschool Teacher | 3 | 6 | 26 |
| Mainstream Teacher Aide | 1 | 1 | 28 |
| Special Education Lead Teacher | 1 | 2 | 25 |
| Integration Facilitator | 4 | 8 | 28 |
| Parent of Child with Severe Disability | 5 | 9 | 26 |
| Parent of Typically Developing Child | 8 | 8 | 8 |
| Special Education Support Staff | 3 | 6 | 25 |
| Facilitator Focus Group Interviews | 4 | 4 | 60 |

**Table 3. Referential data: Circle of Inclusion Project**

- Videotapes of children in classrooms (each child is taped once or twice per week)
- Participant field notes collected by Facilitators
- Reports (anecdotes) from Facilitators and teachers on typically developing children's comments/actions
- Anecdotes reported by parents of children with disabilities
- Anecdotes reported by Raintree teachers and Integration Facilitators
- Observation field notes collected by project staff
- Peer debriefing notes
- Journal and telephone notes
- Meeting agendas and minutes for special education/mainstream staff meetings
- Pictures of children integrated on Raintree activity board
- Construction and adaptations of facilities (ramp, raised gardens, raised sandboxes)
- Presence/purchase of adaptive equipment for children (wedges, adapted potty chairs, swim rings, etc.)
- Parent newsletters with mention of integration project
- Individual Education Plans (IEPs)
- Parent notes
- Written communications from physicians concerning procedures in mainstream setting
- Conference programs
- Letters from visitors

**Table 4. Research procedures employed in qualitative investigation**

- Maintaining persistent and prolonged contact
- Engaging in participant observation
- Conducting repeated tape-recorded open-ended interviews of participants and having the transcripts validated by the participants
- Maintaining field notes and journals
- Maintaining systematic observational recordings and logs
- Routinely videotaping participating children (once or twice per week)
- Collecting of all referential documents
- Documenting data sources to create an audit trail
- Peer debriefing and constant reflection on the data
- Category building from segments of the data using constant comparison and domain analyses to determine patterns, contrasts, and overarching themes
- Establishing consistency of data units by consensus review and consistency of category definitions
- Triangulating multiple data sources
- Employing thick description to portray qualitative results
- Conducting membership check meetings to validate documents

**Table 5. Primary categories and subcategories: *HyperCard*® data base**

Concerns (Expressed):
Anecdotes related
Funding
Initial
Length
Logistics
Parent involvement
Procedures
Program
Relationship
Replication
Transition

Facilitating:
Anecdotes
Coordination tips
Facilitator training
Parent responsibilities
Start-up procedures
Teacher training
Strategies: instruction
Strategies: interactions

Maintaining:
Facilitator role factors
Logistics
Markers for acceptance
Meeting needs
Program collaboration
System for parent info.

Personnel:
Administrator
Assistant
Coordinator
Facilitator
Haworth
Parent
Raintree

Parents:
Anecdotes offered
Expand integration
Facilitator needed
Family identified needs
Full day issues
Funding constraints
Importance of early integration
Increased education
Information dissemination
Involvement in decisions
Logistical issues
Meetings
Parents of typical children
Personal adjustment
Program concerns
Involvement
Teaching empathy
Role in mainstream program

Benefits (To/About):
Anecdotes related
Classroom assistants
Future impact
Children without disabilities
Parents of nondisabled
Parents of disabled
Children with severe disabilities
Mainstream teacher
Societal change/acceptance
School age policy
Social policy
Understanding individual differences

Montessori:
Anecdotes related
Concerns for integration
Conducive to integration

Manual:
Special education techniques
Procedures for integration
General information
Format
Development
Techniques for integration

Anecdotes:
CA
Changing role
CS
SD
GM
JF
MA
Montessori
Children without disabilities
Parent view

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**Table 6. Evaluation of the model: Fall 1986 through fall 1991**

Outcome markers identified by participants as evidence of the program's development and success:

- Shift from participation in the program of one teacher or Montessori director with a special interest in children with disabilities to ongoing involvement of other head teachers—including 5 teachers so far. *(Provides evidence of overall acceptance of the program and expansion of the program.)*
- Mainstream teacher appointed to officially serve as the program's Assistant Director for Special Education; and mainstream program director joins advisory board for early childhood special education programs in the community. *(Provides evidence of program recognition of integral program role of integration and the required management activities.)*
- Listing of special education as a program service in the National American Montessori Teachers' Association International Directory. *(Indicates willingness to be publicly identified with an inclusion program.)*
- Mainstream program administrators invest funds to increase accessibility of the preschool facility. Aesthetic entrance ramp built; elevated sandboxes and garden plots built to accommodate children in wheelchairs' inclusion in sandplay and gardening activities. *(Major fiscal expenditure and structural changes to building and playground suggest significant commitment to the program and sensitivity to enhancing inclusion beyond required standards.)*
- Pictures of children with disabilities involved in activities placed on bulletin board posted in mainstream program entry area along with pictures of typically developing children. *(Without bringing attention to the children's disabilities or making a special announcement of their presence in the program, the use of a regular program strategy, i.e., pictures on the bulletin board, provides evidence to all involved families and staff of the presence and acceptance of the children, their equal status and involvement in the same activities as typical children.)*
- Content in mainstream parent newsletter about individual children or special education staff: listing Facilitators with other new program staff at the beginning of the year; reporting an amusing story about one of the children with disabilities along with other child anecdotes that parents are likely to enjoy; comments such as "we have added a ramp for persons using wheels". *(Indicates that mainstream program staff view the children with disabilities and the integration staff as part of the program.)*
- Ongoing availability of release time for mainstream staff to participate in inservice and conference presentations. *(Suggests willingness to be publicly identified with the program and commitment to sharing information and encouraging others to try inclusive early childhood education.)*
- Established mechanisms for mainstream and special education staff to share information about children, discuss approaches, solve problems, and set policy. *(Mainstream and special education staff participate in ongoing professional interactions via routine meetings, generally biweekly, and via program visitations and shared videotapes of children.)*
- Parent night for the families of children with disabilities conducted in mainstream setting by early educators and special educators in order to address parents' specific concerns and questions. Primary response to individual parents' questions handled by mainstream teacher for the classroom the child will join. *(The availability of this orientation in addition to the general family orientation suggests a recognition on the part of the mainstream staff of the potential concerns of families of children with disabilities and sensitivity and willingness to address these concerns. Also offers evidence of cooperation between staffs.)*

*(continued on next page)*

**Table 6, *continued.* Evaluation of the model: Fall 1986 through fall 1991**

Outcome markers identified by participants as evidence of the program's development and success:

- Mainstream staff participation in routine staff training of new Facilitators. *(Interest in delineating training needs, planning training strategies and conducting training suggests investment in program content and a sense of joint ownership of model.)*
- Invited inservice and consultation provided for mainstream staff by related service staff. *(Mainstream staff's request for information about specific children indicates awareness of need for special techniques and a willingness to learn about and employ recommended procedures.)*
- Mainstream staff assumes the primary role for orienting and handling individuals requesting to observe the program. Considerable interest in the program has resulted in frequent requests to visit and observe. *(Willingness to respond to this interest and present the model to visitors suggests willingness to be publicly identified with the program and commitment to sharing information and encouraging others to try inclusive early childhood education.)*
- Mainstream staff identify equipment and materials specifically to enhance participation and positioning of children with disabilities. *(Awareness suggests attention to the specific needs of children and increasing understanding of characteristics and needs of children with disabilities.)*
- Participation time for children with disabilities in the mainstream program is increased to correspond to the times and types of participation available to typically developing children. Shift for all children from attendance for 2 half-day preschool sessions per week to attendance for the full week of half-day preschool sessions. Beginning in September 1990, some of the children also participate in the child-care portion of the program, such as lunch, early a.m. and late p.m. program. Shift completely out of special education preschool setting to attend mainstream program exclusively for all children for summer session and for one child during entire school year. *(Increase in time for the children's schedules has multiple results: same program schedule eliminates the obtrusiveness of different schedules; increase in time suggests increasing confidence in and commitment to the program feasibility and recognition of the benefits on the part of the mainstream and special education staff and families of the children.)*
- Joint effort on the part of special education and mainstream staff and families to plan and produce 3 videotapes depicting the rationale and initial issues and concerns of the participants as well as the salient strategies for facilitating the meaningful inclusion of the children. *(Effort involves coming to consensus on what key issues to present and which salient features to describe of the program. Required using a membership check process (Lincoln & Guba, 1985) to review and validate script-based data collected via ethnographic investigation.)*
- Joint effort between mainstream and early childhood special education teachers to advocate for a child's placement in an inclusive kindergarten setting when child transitions to another district. Coordination of effort and sense of unity is considerable when representing child prior to and at IEP conferences. *(A "coming together" to advocate for a child and represent the project values seemed to be the pivotal factor in enhancing relationships between staff from the two programs.)*

## Table 7. Initial concerns of participants

| Participant | Concern |
|---|---|
| Parents of children with disabilities | Child's adjustment<br>Acceptance of child by mainstream staff and typical children<br>Adequacy of environmental adaptations<br>Appropriateness of environment<br>Child's safety |
| Parents of typically developing children | Potential loss of needed teacher attention for their child<br>Potential concern that there would be too many children with disabilities in one classroom, affecting the nature of activities and interactions in the setting<br>Could make the classroom seem more crowded and response to access needs could affect freedom of movement |
| Special Education staff | Accessibility without intrusiveness<br>Communication between programs<br>Logistics and liability factors<br>Acceptance of children by mainstream staff and typical children<br>How to implement effective integration strategies<br>Potential problems with the adjustment of children with disabilities and their parents |
| Montessori staff | Effect on the program of an untrained, additional adult (Integration Facilitator) in the classroom<br>Accessibility of the setting<br>Communication between programs<br>Meeting licensing requirements<br>Financial feasibility of the program<br>Fear of handling children with disabilities<br>Level of comfort of children with disabilities and their parents<br>Potential problems with parental adjustment to the mainstream setting |

## Table 8. Identified benefits

| Recipient of the Benefits | Benefits |
|---|---|
| Community/society | Increasing public awareness and education<br>Increasing public acceptance<br>Positively impacting on attitudes about mainstreaming and community integration policy |
| Typical children | Preparing for future encounters with disability in one's life<br>Increasing acceptance of individual differences<br>Becoming comfortable with people who have disabilities<br>Having an opportunity to help someone<br>Developing desirable personal qualities |
| Children with disabilities | Expanding circle of friends<br>Increasing access to normal life routines and activities<br>Increasing resources from program combination<br>Improving communication and socialization environments<br>Enhancing opportunities for generalization across settings, materials and persons<br>Availability of full-day child care |

## Table 9. Split program impact on participants

**Parents**
Parents are asked to respond to two sets of procedures, paperwork, staff, calendars and schedules; and they must fulfill two sets of parental roles defined by both mainstream and special education programs.

**Children with disabilities**
Children with disabilities are asked to respond to different settings, routines, rules and staff within a single day as well as to the very different level and types of adaptation and support offered in each setting. The level of bonding and friendships between children with disabilities and typical peers may be affected by time in setting. May facilitate generalization.

**Staff**
Staff have increased demands for ongoing communication, which are impacted by the different settings, schedules, diverse perspectives, philosophies and training. Problems with program competition can occur. Special accommodations are required to adjust to schedule mismatches for students.

## Table 10. Potential problems in matching parents' needs with mainstream Montessori program: Variables that must be addressed in planning and conducting integration program

| Source of Variable | Key Variables |
|---|---|
| Needs indicated by parents | Need to feel included in the full range of program activities<br>Need to feel adequately informed about activities and child progress<br>Need to have "adequate" teacher contacts<br>Need to be consulted about child's program |
| Mainstream program variables impacting on parental needs | Larger student-to-staff ratios affect time per family<br>Less staff time allocated for planning and conferring with parents<br>No formal Individualized Educational Planning strategies<br>Montessori philosophy views classroom as a child's world, involvement of parents not as emphasized as in typical special education early intervention programs |

*Comment*: One of the interesting results of the data is the adjustment to the mainstream program required of parents who are used to dealing with special education programs. Essentially, parents want to be like all the other parents, and yet they feel a considerable need to be given more attention and information than the parents of typically developing children generally receive. Given the staff situations in most mainstream programs, this is a challenging issue which needs to be addressed by models involving integrated preschool and child care services for children with severe disabilities.

**Table 11. *Characteristics of children with severe and profound multiple disabilities* and related accommodation and planning requirements**

**Significant Child Characteristics**

- Significant discrepancy between chronological age and development
- Non-ambulatory
- Limited trunk and head control
- Presence of primitive reflexes and abnormal tone
- Nonverbal communication
- Self-stimulatory behavior
- Drooling
- Limited eye contact
- Limited display of affect
- Range of medical conditions

**Special Planning and Accommodation Requirements**

- Including adaptive equipment in the setting
- Implementing handling and positioning strategies
- Providing an accessible environment
- Employing methods to normalize participation
- Employing special mealtime procedures
- Employing special bathroom procedures
- Employing needed health-care procedures
- Utilizing alternative communication systems
- Recognizing nonverbal communication
- Providing necessary staff support
- Introducing the child to typical peers
- Responding to questions from typical students
- Responding to questions from parents of typical students

**Table 12. Variables related to Montessori approach**

**Variable One: Preconceived notions about Montessori programs**

- "inadequate social and language skills"
- "fails to include certain activities"
- (dramatic play)
- "dull, monotone materials"
- "interferes with adjustment to other programs"
- "lacks flexibility"
- "too academic"
- "non-nurturing"

**Variable Two: Participants viewed Raintree Montessori as an excellent program**

- easy to individualize
- acceptance and respect of staff for the children
- overall high-quality program
- high frequency of opportunities for social interaction
- exceptionally competent and caring administration and staff

**Variable Three: Participants identified features of the Montessori approach that were related to the success of the program**

- cross-age grouping
- individualization and independence
- respect for child and focus on capabilities
- quality and nature of the materials
- opportunities for choice
- encouragement of helping